

**ABSTRACT**

In the present invention, an optical reader image sensor is adapted to clock out image data from an image sensor according to "low resolution" mode of operation in order to reduce a parameter determination delay of the reader. In a low resolution mode, some pixels of the readers image sensor array are clock out at normal clock out speed sufficient to develop electrical signals accurately reflecting the intensity of light at the respective pixel positions, while other pixels of the array are either not clocked out or are clocked out at a higher clock out rate which may be insufficient to allow development of electrical signals that accurately represent light incident on the image sensor's sensor array but which nevertheless, results in a reduction of the overall frame clock out rate of the frame of image data. An optical reader according to the invention operates in a low resolution frame clock out mode to capture a low resolution parameter determining frame of image data at high speed, reads pixel data from the parameter determination frame to determine an operation parameter based on actual illumination conditions, then utilizes the operation parameter in operating an optical reader.